AEROSOL CONTAINERS

HAZARDS & RULES

Base Materials - Hazards & Impacts

Aerosol sprays contain a liquid or gaseous propellant that is packed under pressure. Many of the propellants used in aerosol containers are highly flammable and potentially explosive. Because of this, they should not be heated or stored in direct sunlight. When incinerated, aerosol containers may explode, releasing the propellant and any remaining product, and scattering small pieces of sharp metal.

Additives and Contaminants - Hazards & Impacts

The hazards and impacts vary depending upon the product within the aerosol can. Some products contain hazardous materials, which may be corrosive or poisonous, or may form a toxic gas when heated. Aerosol containers emit chemicals in a mist of fine particles that are easily inhaled and absorbed into the bloodstream. Thus, a chemical that may be harmless in its liquid or solid form may be extremely dangerous as an aerosol mist.

Regulatory Overview

Empty aerosol containers may be sent to a scrap metal recycler for recycling. Containers that are totally empty are not considered to be a hazardous waste and may be disposed with your regular trash. An aerosol container is considered to be empty when the pressure in the container approaches atmospheric pressure (i.e., nothing comes out of the can when the nozzle is not clogged and is pressed.) Note that a clogged can still contains materials, it is not considered to be empty. If you dispose of cans that are not empty, you must make a hazardous waste determination and manage the cans accordingly.

MANAGEMENT RESPONSIBILITIES

Listed below are the management responsibilities that you must follow for aerosol cans that contain or contained hazardous material(s). Also listed are suggested practices that you should follow in order to ease your regulatory requirements.

You Must:

- ensure that your aerosol cans are either totally empty or significantly empty prior to sending them to a scrap metal recycler.
- ensure that your aerosol cans are totally empty prior to disposing of them.
    - if the can no longer has a sufficient amount of propellant to force the product out, puncture and drain the container. The product drained from the punctured container must be used for its intended purpose or characterized to determine if it is a hazardous waste. Be sure to use the product's MSDS sheet to familiarize yourself with its hazards prior to puncturing and draining the container. Also ensure that appropriate personal protective equipment (e.g., safety glasses and gloves) is worn during this

process.
    - make a hazardous waste determination on the container and the remaining product, and manage it accordingly.

You Should:

- when containers are not in use, ensure that the caps of aerosol containers are in place. This will reduce the possibility of damage to the spray nozzle.
- if the can is not empty, you should use the remaining product for its intended purpose.
- recycle your empty aerosol cans. A list of scrap metal recyclers may be obtained via IDEM's web site.

You Should Consider:

- implementing inventory control procedures for the products used in your shop. This includes:
    - purchasing products according to need rather than purchasing bulk quantities. Products that are not used before their shelf-life expires must be disposed, sometimes as a hazardous waste. The disposal cost will often exceed the purchase price of the item.
    - using products on a first-in, first-out basis. This will reduce the potential of a product's becoming a waste because its shelf-life expired before it could be used.
    - issuing products to each service technician and requiring that they turn in an empty aerosol containers before receiving a replacement container. This type of system will ensure that technicians do not misplace a product, open a new product, and allow the misplaced product's shelf-life to expire before it can be used. This type of system will also allow you to identify technicians using a large volume of a given product and work with them to ensure the product is being used properly.
- purchasing products in reusable pump spray, roll-on, liquid, or non-aerosol spray applicators. Aerosol cans are generally used for convenience, but are generally no more effective than products that are applied by pouring, wiping or brushing.